

CLAIMS

We claim:

1. A method for binding a building block of a platform to a partition in a masterless manner comprising:

sending to other building blocks of the platform a first physical port identifier

indicating a physical location of the building block in the platform;

sending to the other building blocks a first partition identifier indicating the partition of the building block;

receiving from the other building blocks second physical port identifiers and second partition identifiers;

sending the first physical port identifier and the second physical port identifiers of a subset of the other building blocks to the subset, the second partition identifiers of the subset equal to the first partition identifier;

receiving the first physical port identifier and the second physical port identifiers of the subset of the other building blocks from each other building block of the subset;

sending to the subset of the other building blocks a first logical port identifier indicating a logical location of the building block in the partition indicated by the first partition identifier;

receiving from the subset of the other building blocks second logical port identifiers;
and,

joining the partition indicated by the first partition identifier.

2. The method of claim 1, further comprising, prior to sending to the other building blocks of the platform the first physical port identifier, determining the first physical port identifier.
3. The method of claim 1, further comprising, prior to sending to the other building blocks the first partition identifier, determining the first partition identifier.
4. The method of claim 1, further comprising, after receiving the first physical port identifier and the second physical port identifiers of the subset of the other building blocks from each other building block of the subset, verifying that the first physical port identifier and the second physical port identifiers of the subset received from each other building block of the subset equal the first physical port identifier and the second physical port identifiers of the subset previously sent to the subset.
5. The method of claim 1, further comprising, prior to sending to the subset of the other building blocks the first logical port identifier, determining the first logical port identifier.
6. The method of claim 1, further comprising, after receiving from the subset of the other building blocks the second logical port identifiers, verifying that each of the first logical port identifier and the second logical port identifiers is relatively unique.
7. The method of claim 1, further comprising, in response to determining that the first logical port identifier is less than each of the second logical port identifiers, booting the partition.

8. The method of claim 1, further comprising:

setting a first boot identifier as a lowest of the first logical port identifiers and the second logical port identifiers;

receiving from the subset of the other building blocks second boot identifiers; and
verifying that the first boot identifier equals each of the second boot identifiers.

9. The method of claim 1, further comprising:

protecting the building block; and
protecting the partition.

10. The method of claim 9, wherein protecting the building block comprises setting a protect indicator of the building block.

11. The method of claim 1, wherein joining the partition indicated by the first partition identifier comprises setting a commit indicator of the building block.

12. The method of claim 1, further comprising, prior to receiving from the other building blocks the second physical port identifiers and the second partition identifiers, waiting for the other building blocks for a length of time based on whether the other building blocks are resetting or rebooting themselves.

13. The method of claim 1, further comprising, prior to receiving from the subset of the other building blocks the second logical port identifiers, waiting for the subset of the other building blocks for a length of time based on whether the subset of the other

building blocks are reinitializing hardware and software of the subset of the other building blocks.

14. A system comprising:

a platform;

a plurality of building blocks of the platform, each building block having a physical port identifier indicating a physical location in the platform, a partition identifier, and a logical port identifier indicating a logical location in a partition identified by the partition identifier; and,

a plurality of partitions of the platform, the partition identifier of each of the plurality of building blocks indicating one of the plurality of partitions to which the building block is bound in a masterless manner using the physical port identifiers, the logical port identifiers, and the partition identifiers of the plurality of building blocks.

15. The system of claim 14, wherein each building block further has a protect indicator indicating whether the building block is currently write protected.

16. The system of claim 14, wherein each building block further has a commit indicator indicating whether the building block is currently bound to the one of the plurality of partitions indicated by the partition identifier of the building block.

17. The system of claim 14, wherein each building block further has a status indicator indicating a current status of the building block.

18. The system of claim 14, wherein the masterless manner uses the physical port identifiers, the logical port identifiers, and the partition identifiers of the plurality of building blocks by each of the plurality of building blocks at least one of selectively sending to and receiving from other of the plurality of building blocks the physical port identifiers, the logical port identifiers, and the partition identifiers of the plurality of building blocks.

19. An article comprising:

a computer-readable medium; and,

means in the medium for joining a partition indicated by a first partition identifier of a building block of a platform in a masterless manner by using the first partition identifier, a first physical port identifier indicating a physical location of the building block in the platform, and a first logical port identifier indicating a logical location of the building block in the partition indicated by the first partition identifier, and second partition identifiers, second physical port identifiers, and second logical port identifiers of other building blocks of the platform.

20. The article of claim 19, wherein the means uses the first partition identifier, the first physical port identifier, and the first logical port identifier, and the second partition identifiers, the second physical port identifiers, and the second logical port identifiers of the other building blocks of the platform by selectively sending at least one of the first partition identifier, the first physical port identifier, and the first logical port identifier, and the second partition identifiers, the second physical port identifiers, and the second

logical port identifiers of the other building blocks of the platform to at least some of the other building blocks of the platform.

21. The article of claim 19, wherein the means uses the first partition identifier, the first physical port identifier, and the first logical port identifier, and the second partition identifiers, the second physical port identifiers, and the second logical port identifiers of the other building blocks of the platform by selectively receiving at least one of the first partition identifier, the first physical port identifier, and the first logical port identifier, and the second partition identifiers, the second physical port identifiers, and the second logical port identifiers of the other building blocks of the platform from at least some of the other building blocks of the platform.

22. The article of claim 19, wherein the medium is one of a modulated carrier signal and a recordable data storage medium.